

## **IN THE CLAIMS**

This **Listing of Claims** will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1-32 (cancelled)

33. (currently amended) An endodontic dental reinforcement post comprising a bundle of non-metallic, ~~and non-woven~~ fiberglass fibers prefabricated in a cured resin and ~~[[,]]~~ forming a reinforced plastic composite, wherein said post is ~~being~~ flexible, ~~prefabricated~~, and adapted to extend from an apical end to a coronal end of a tooth canal and, ~~said post~~ having a flexibility approximating a ~~the~~ flexibility of a natural tooth structure and, ~~said post~~ having a modulus of elasticity along a longitudinal axis of the prefabricated post approximating a ~~the~~ modulus of elasticity of a natural tooth structure, wherein upon fixation within an endodontically treated tooth, said post relieving stress concentrations within the tooth ~~structure~~ by shifting of stress concentrations away from an apical end of the endodontically treated tooth under excessive tooth force loads to a coronal end of the endodontically treated tooth.

34. (previously presented) The dental reinforcement post as in Claim 33 wherein said post is translucent.

35. (currently amended) The dental reinforcement post as in Claim 33 wherein said reinforced plastic composite comprises E-glass fibers.

36. (cancelled)

37. (cancelled)

38. (previously presented) The dental reinforcement post as in Claim 33 further comprising an epoxy resin.

39. (previously presented) The dental reinforcement post as in Claim 38 wherein said epoxy resin further comprises an opaquer composition.

40. (previously presented) The dental reinforcement post as in Claim 33 wherein said post has a rounded bottom end.

41. (cancelled)

42. (previously presented) The dental reinforcement post as in Claim 33 further comprising at least one surface cut of about 50-100 micron depth to increase texturing.

43. (cancelled)

44. (previously presented) The dental reinforcement post as in Claim 33 further comprising at least one groove of about 50 to 100 micron depth to increase texturing.

45. (previously presented) The dental reinforcement post as in Claim 33 further comprising at least one indentation of about 50 to 100 micron depth to increase texturing.

46. (previously presented) The dental reinforcement post as in Claim 42 further comprising at least one axially extending die drawn indentation of 50 to 100 micron depth to increase texturing.

47-49 (cancelled)

50. (previously presented) The dental reinforcement post as in Claim 33 wherein said post is a dental reconstructive pin.

51. (cancelled)

52. (previously presented) The dental reinforcement post as in Claim 33 wherein said post is polished at one end to direct light axially therethrough.

53. (previously presented) The dental reinforcement post as in Claim 33 wherein said reinforced plastic composite comprises a plurality of adjacent coaxially extending dental reinforcement fibers.

54. (currently amended) The dental reinforcement post as in Claim 53 wherein said post includes at least one axially extending facet for locking said post in position within an interior canal of the endodontically treated ~~[[a]]~~ tooth.

55. (currently amended) A dental post and core device comprising a prefabricated, inelastic, flexible~~[[,]]~~ post,~~said post~~ having a coronal end and an apical end, said post comprising a bundle of non-metallic and non-woven fiberglass fibers in a cured resin~~[[,]]~~ forming a reinforced plastic composite, wherein said fibers extend ~~extending~~ between the coronal end and the apical end of said post, wherein said post having a flexibility approximating a ~~the~~ flexibility of a natural tooth structure ~~and~~ ~~;~~ ~~said post~~ having a modulus of elasticity along a longitudinal axis of the prefabricated dental post and core device approximating a ~~the~~ modulus of elasticity of a natural tooth structure, and wherein said post relieving stress concentrations within an endodontically treated ~~the tooth~~ into which it is fixated ~~structure~~ by shifting of stress concentrations away from an apical end of the endodontically treated tooth under excessive tooth force loads to a coronal end of the endodontically treated tooth.

56. (cancelled)

57. (cancelled)

58. (previously presented) The endodontic dental reinforcement post as in Claim 33 wherein said post is cylindrical.

59. (previously presented) The dental post as in Claim 33 wherein said post is tapered.

60. (previously presented) The dental post and core device as in Claim 55 wherein said post is cylindrical.

61. (previously presented) The dental post and core device as in Claim 55 wherein said post is tapered.

62. (cancelled)

63. (cancelled)

64. (previously presented) The dental reinforcement post as in Claim 33 wherein said post comprises a plurality of circumferential serrations.

65. (previously presented) The dental post and core device as in Claim 55 wherein said post comprises a plurality of circumferential serrations.

66-69 (cancelled)

70. (previously presented) The dental reinforcement post as in Claim 38 wherein said epoxy resin comprises bisGma.

71. (previously presented) The dental reinforcement post as in Claim 33 wherein said bundle of fibers comprises S-glass.

72. (previously presented) The dental reinforcement post as in Claim 39 wherein said opaquer composition is a radio-opaque composition.

73. (previously presented) The dental reinforcement post as in Claim 72 wherein said radio-opaque composition is barium sulfate.

74. (previously presented) The dental post and core device as in Claim 55, wherein said reinforced plastic composite comprises S-glass fibers.

75. (previously presented) The dental post as in Claim 55, wherein said reinforced plastic composite comprises a twisted bundle of fibers.

76. (previously presented) The dental reinforcement post as in Claim 33 wherein said reinforced plastic composite comprises a twisted bundle of fibers.

77. (currently amended) An endodontic dental reinforcement post for ~~of~~ endodontic and reconstructive pin therapy comprising a prefabricated, flexible fiberglass

reinforced plastic composite consisting essentially of a bundle of fiberglass fibers;  
~~wherein said post is flexible, prefabricated, and~~ adapted to extend from an apical end to a  
coronal end of a tooth canal of an endodontically treated tooth into which said post is  
fixated;

wherein said post having a flexibility approximating a~~the~~ flexibility of a natural  
tooth structure of the endodontically treated tooth and ; said post having a modulus of  
elasticity along a longitudinal axis of the prefabricated post approximating a~~the~~ modulus  
of elasticity of a natural tooth structure of the endodontically treated tooth, and

wherein said post relieving stress concentrations within the endodontically treated  
tooth into which it is fixated ~~structure~~ by shifting of stress concentrations away from an  
apical end of the endodontically treated tooth under excessive tooth force loads to a  
coronal end of the endodontically treated tooth.

78. (currently amended) A prefabricated dental post consisting essentially of  
bundles of twisted fiberglass reinforced plastic fibers in a cured resin composite, ~~wherein~~  
~~said bundles of fibers are twisted, and wherein said post is prefabricated such that said~~  
~~post is ready~~ for insertion into a the root canal of an endodontically treated tooth;

wherein said post having a flexibility approximating a~~the~~ flexibility of a natural  
tooth and ; said post having a modulus of elasticity along a longitudinal axis of the  
prefabricated post approximating a~~the~~ modulus of elasticity of a natural tooth structure,  
and

wherein said post relieving stress concentrations within a~~the~~ tooth structure of  
said endodontically treated tooth into which it is inserted by shifting of stress

concentrations away from an apical end of the endodontically treated tooth under excessive tooth force loads to a coronal end of the endodontically treated tooth.

79. (cancelled)

80. (previously presented) The dental post of Claim 78, wherein said bundles of fiberglass reinforced plastic fibers comprise at least one non-axially aligned fiber.

81. (previously presented) The dental post of Claim 78, wherein said bundles of fiberglass reinforced plastic fibers are equally dispersed throughout the post.

82. (previously presented) The dental post of Claim 78, wherein said resin comprises a filler.

83. (previously presented) The dental post of Claim 82, wherein said filler is radio-opaque.

84. (previously presented) The dental post of Claim 78, wherein said resin comprises an epoxy resin.

85. (currently amended) The dental post of Claim 84, 85, wherein said epoxy resin is bisGma.



86. (previously presented) The dental post of Claim 78, wherein said resin comprises an opaquer composition.

87. (previously presented) The dental post of Claim 86, wherein the opaquer composition is barium sulfate.

88. (previously presented) The dental post of Claim 78, wherein said post is generally cylindrical.

89. (previously presented) The dental post of Claim 78, wherein said post comprises a plurality of circumferential serrations.

90. (previously presented) The dental post of Claim 78, wherein said post is translucent.

91. (previously presented) The dental post of Claim 78, wherein said post has a diameter of between 0.36 to .70 inches.

92. (previously presented) The dental reinforcement post as in Claim 33 wherein said fiberglass reinforced plastic composite comprises S-glass fibers.

93. (previously presented) The dental reinforcement post as in Claim 33 wherein said post has a modulus of elasticity less than or equal to that of tooth dentin.

94. (previously presented) The dental post and core device as in Claim 55 wherein said inelastic post has a modulus of elasticity less than or equal to that of tooth dentin.

95. (previously presented) The endodontic dental reinforcement post of Claim 77 wherein said post has a modulus of elasticity less than or equal to that of tooth dentin.

96. (previously presented) The dental post of Claim 78 wherein said post has a modulus of elasticity less than or equal to that of tooth dentin.

97. (previously presented) The dental reinforcement post as in Claim 33 wherein said bundle of non-metallic and non-woven fiberglass fibers are loosely compacted and cured in said resin.

98. (previously presented) The dental post and core device as in Claim 55 wherein said bundle of non-metallic and non-woven fiberglass fibers are loosely compacted and cured in said resin.

99. (previously presented) The endodontic dental reinforcement post of Claim 77 wherein said bundle of fiberglass fibers are loosely compacted and cured in a resin.

100. (previously presented) The dental post of Claim 78 wherein said bundle of fibers are loosely compacted and cured in a resin.

101. (currently amended) A prefabricated endodontic dental reinforcement post adapted for fixation within to extend in a tooth canal of an endodontically treated tooth such that said post extends from between at least a coronal end of the tooth cavity into the tooth canal and at most to an apical end of the a-tooth canal, said reinforcement post comprising:

a bundle of non-metallic, non-woven fiberglass fibers;

a cured resin, wherein at least a central portion and a lower portion of said bundle of non-metallic, non-woven fiberglass fibers being in said cured resin and forming a flexible, reinforced composite plastic prefabricated post adapted to be positionable in the tooth canal, and wherein said lower portion of said bundle extending between at least said coronal end and at least of the tooth canal into the tooth canal toward said apical end of the tooth canal; and

wherein after fixation within an endodontically treated tooth, a post axis extends longitudinally adapted to extend along a the tooth canal of said endodontically treated tooth into which it is fixated, such that said bundle of non-metallic, non-woven fiberglass fibers are being twisted with respect to said post axis while said post displays having a flexibility approximating a the flexibility of a natural tooth structure and; said post having a modulus of elasticity along the longitudinally extending axis of the prefabricated post approximating a the modulus of elasticity of a natural tooth structure; and

wherein said post relieves relieving stress concentrations within said endodontically treated tooth into which said post is fixated the tooth structure by shifting

of stress concentrations away from an apical end of the tooth under excessive tooth force loads to a coronal end of the tooth.

102. (previously presented) The prefabricated endodontic dental reinforcement of Claim 101 wherein said bundle includes an upper portion adapted to be positionable above said coronal end of said tooth canal.

103. (previously presented) The prefabricated endodontic dental reinforcement of Claim 102 wherein said upper portion of said bundle may be selectably flared.

104. (previously presented) The prefabricated endodontic dental reinforcement of Claim 102 further including a core spacer positionable on said bundle at said central portion of said bundle at said coronal end of said tooth canal.

105. (currently amended) A dental post and core device comprising a prefabricated, inelastic, flexible[[,]] post, ~~said post~~ having a coronal end and an apical end, said post comprising:

a bundle of non-metallic and non-woven medical grade optical fibers in a cured resin, forming a reinforced plastic composite, wherein said fibers extend ~~extending~~ between the coronal and the apical end and ~~of said post~~, said post displays ~~having~~ a flexibility approximating a ~~the~~ flexibility of a natural tooth structure and, ~~said post having~~ a modulus of elasticity along a longitudinal axis of the prefabricated post and core device approximating a ~~the~~ modulus of elasticity of a natural tooth structure, and

wherein said post reduces ~~reducing~~ stress concentrations within an endodontically treated ~~the tooth~~ into which the post is fixated ~~structure~~ by shifting of stress concentrations away from an apical end of the endodontically treated tooth under excessive tooth force loads to a coronal end of the endodontically treated tooth.

106. (currently amended) An endodontic dental reinforcement post for ~~of~~ endodontic and reconstructive pin therapy, said post comprising

a flexible, prefabricated, fiberglass reinforced plastic composite consisting essentially of a bundle of medical grade optical fibers, wherein said post is flexible, prefabricated, and adapted to extend from an apical end to a coronal end of a tooth canal of an endodontically treated tooth into which said post is fixated, and to display said post having a flexibility approximating a the flexibility of a natural tooth structure and ; said post having a modulus of elasticity along a longitudinal axis of the prefabricated post and core device approximating a the modulus of elasticity of a natural tooth structure,

where said post reduces ~~reducing~~ stress concentrations within the endodontically treated ~~tooth structure~~ by shifting of stress concentrations away from an apical end of the tooth under excessive tooth force loads to a coronal end of the tooth.

107. (currently amended) A flexible, prefabricated dental post consisting essentially of bundles of reinforced medical grade optical fibers in a cured resin composite,

wherein said bundles of fibers are twisted, and ~~wherein~~ said post is prefabricated and flexible such that ~~said post~~ it is ready for insertion into a the root canal of an

endodontically treated tooth, wherein said post has having a flexibility approximating a  
the flexibility of a natural tooth structure and ~~;said post having a modulus of elasticity~~  
along a longitudinal axis of the prefabricated post approximating a the modulus of  
elasticity of a natural tooth structure, and

wherein said post reduces ~~reducing~~ stress concentrations within ~~the~~ an  
endodontically treated tooth into which the prefabricated dental post is inserted ~~structure~~  
by shifting of stress concentrations away from an apical end of the endodontically treated  
tooth under excessive tooth force loads to a coronal end of the endodontically treated  
tooth.

108. (currently amended) A flexible, prefabricated endodontic dental  
reinforcement post constructed for insertion into an endodontically treated tooth and  
adapted to extend within ~~in~~ a tooth canal of the endodontically treated tooth from  
between at least a coronal end of a the tooth cavity into the tooth canal and at most to an  
apical end of the a-tooth canal, said reinforcement post comprising:

a bundle of non-metallic, non-woven medical grade optical fibers;

a cured resin, at least a central portion and a lower portion of said bundle of non-  
metallic, non-woven medical grade optical fibers being immersed in said cured resin ~~and~~  
~~forming a reinforced composite plastic prefabricated post adapted to be positionable in~~  
~~the tooth canal, wherein upon insertion of the post into said endodontically treated tooth,~~  
said lower portion of said bundle extending between at least said coronal end and ~~of the~~  
~~tooth canal into the tooth canal toward said apical end of the tooth canal~~ into which it is  
inserted; and

wherein the reinforced post includes a longitudinal post axis adapted to extend along the tooth canal into which it is inserted, said bundle of non-metallic, non-woven medical grade optical fibers being twisted with respect to said post axis such that said reinforced post displaying having a flexibility approximating a the flexibility of a natural tooth structure and ; said post having a modulus of elasticity along the longitudinal axis of the prefabricated post approximating a the modulus of elasticity of a natural tooth structure; and

wherein said post reduces reducing stress concentrations within the tooth into which it is inserted structure by shifting of stress concentrations away from an apical end of the tooth under excessive tooth force loads to a coronal end of the tooth.